

Apparatus and Method for Sending and/or Receiving Data in an SDH or, Respectively,  
PDH Transmission System

**Abstract**

The present invention is directed to an apparatus for sending data in an  
5 SDH or, respectively, PDH transmission system, comprising a means (2) for arranging  
data incoming in a plurality of data channels in mini-cells (7) of flexible length and a  
means (3) for generating a single data stream from the mini-cells (7), and is  
characterized by a means (6) for the direct generation of transmission frames  
corresponding to the SDH or, respectively, PDH transmission system from the data  
10 stream. The present invention also comprises a method for sending data in an SDH  
or, respectively, PDH transmission system, comprising the following steps: arranging  
data incoming in a plurality of data channels in mini-cells of flexible length, generating  
a single data stream from the mini-cells, and directly generating transmission frames  
corresponding to the SDH or, respectively, PDH transmission system from the data  
15 stream. The present invention further comprises a corresponding apparatus and a  
corresponding method for receiving such data in an SDH or, respectively, PDH  
transmission system. The present invention thus allows the utilization of existing  
AAL2 standards and AAL2 standards yet to be defined, while avoiding the loss of  
transmission bandwidth connected with the use of ATM cells.

20 Figure 1

**Abstract**

Apparatus and Method for Sending and Receiving Data in an SDH or PDH Transmission System

5           An apparatus and method for sending data in an SDH or PDH transmission system, including an arrangement unit for arranging data incoming in a number of data channels into mini-cells of flexible length and a multiplexer for generating a single data stream from the mini-cells. Additionally, a frame generator is included for the direct generation of transmission frames corresponding to the SDH or PDH transmission system from the data stream. The method for sending data in an SDH or PDH transmission system includes arranging data incoming in a number of data channels in mini-cells of flexible length, generating a single data stream from the mini-cells, and directly generating transmission frames corresponding to the SDH or PDH transmission system from the data stream. The present invention further includes a corresponding apparatus and method for receiving such data in an SDH or PDH transmission system. The present invention allows the utilization of existing AAL2 standards and AAL2 standards yet to be defined, while avoiding the loss of transmission bandwidth connected with the use of ATM cells.

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